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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/782,751

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Stein A. Lundby

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QUALCOMM INCORPORATED  
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EXAMINER

CHAN, RICHARD

ART UNIT

PAPER NUMBER

2618

NOTIFICATION DATE

DELIVERY MODE

02/17/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

<b>Office Action Summary</b>	<b>Application No.</b> 09/782,751	<b>Applicant(s)</b> LUNDBY, STEIN A.	
	<b>Examiner</b> RICHARD CHAN	<b>Art Unit</b> 2618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 11-26, 28, 29, 33, 34, 38, 39 and 42-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11-26, 28, 29, 33, 34, 38, 39 and 42-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/11/10</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. The indicated allowability of claims 11,12, 16, 18, 22, and 24 is withdrawn in view of the newly discovered subject matter within Tiedemann (US 6,396,867).. Rejections based on the newly cited passages below.

The term “SNR” is interpreted by the examiner energy per bit to noise plus interference ration  $E_o/I_o$ .

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 11-26, 28-29, 33, 34, 38, 39, 42-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Tiedemann (US 6,396,867).

Regarding claims 1, 13, 17, 19, 23, 25 Tiedemann teaches a remote station apparatus (element 6) comprising: a link quality estimation unit operative to generate a link quality estimate in response to a forward link power control instruction received on a forward link common channel 10; (Col.7 line 19-26) and (Col.8 line 46-63) wherein the

Art Unit: 2618

apparatus shares the forward link common channel with at least one remote station;  
(Col.2 line 41-61) & (Col.6 line 38-62)

and a power control unit coupled to the link quality estimation unit, the power control unit operative to generate a reverse link power control instruction in response to the link quality estimation, wherein the reverse link power control instruction includes one or more commands configured to adjust a transmit power of the forward link at a base station. (Abstract) and (Col.7 line 31-57)

Regarding claim 2, 14, 20, Tiedemann discloses the apparatus of claim 1, wherein the apparatus controls transmission power of the reverse link power control instruction on a reverse link in response to the forward link power control instruction (Col.7 line 31-57)

Regarding claims 3, 15, and 21, Tiedemann teaches the apparatus transmits the reverse link power control instruction on a reverse link. (Col.7 line 31-57)

Regarding claims 4, 26, Tiedemann teaches an apparatus (element 6) comprising: a determination unit 120 operative to determine a reverse link power control instruction received on a reverse link for base station transmission on a forward link; (Col.7 line 19-26) and an adjustment unit coupled to the determination unit, the adjustment unit operative to adjust a power level of the a forward link power control instruction based on the reverse link power control instruction; and a transmitter

Art Unit: 2618

operative to transmit the forward link power control instruction on a forward link common channel. (Col.8 line 46-63) & (Col.7 line 50-59)

Regarding claims 11, 17, 46, and 47, Tiedemann discloses wherein the apparatus comprising: a determination unit operative to determine a reverse link power control instruction received on a reverse link for base station transmission on a forward link; (Col.7 line 19-26) and (Col.8 line 46-63)

an adjustment unit coupled to the determination unit, the adjustment unit operative to adjust a transmission power level of a forward link power control instruction based on the reverse link power control instruction, wherein the transmission power level of the forward link power control instruction is initially set to a reference value. (Col.7 line 50-59) and a transmitter operative to transmit the forward link power control instruction on a forward link common channel. (Col.8 line 46-63).

Regarding claims 12, 16, and 45 Tiedemann discloses the apparatus comprising: a link quality estimation unit operative to generate a link quality estimation in response to a forward link power control instruction received on a forward link common channel, (Col.7 line 19-26) and (Col.8 line 46-63) wherein the link quality estimation is a SNR; (Col.2 line 10-19) and a power control unit coupled to the link quality estimation unit, the power control unit operative to generate a reverse link power control instruction in response to the link quality estimation, (Col.7 line 50-59) wherein the reverse link

Art Unit: 2618

power control instruction includes one or more commands configured to adjust a transmit power of the forward link at a base station. (Col.8 line 46-63).

Regarding claim 27, Tiedemann teaches an apparatus (element 6) comprising of claim 1, wherein the forward link power control instruction was received on a forward link common channel. (Col.8 line 46-63) & (Col.7 line 50-59)

Regarding claim 28, Tiedemann teaches the apparatus of claim 1, wherein the link quality estimation unit is operative to generate the link quality estimation based on a received power level of the forward link power control instruction. (Col.8 line 46-63) & (Col.7 line 50-59)

Regarding claim 29, Tiedemann teaches an apparatus (element 6) comprising of claim 4, wherein the forward link power control instruction was received on a forward link common channel. (Col.7 line 19-26)

Regarding claim 34 39, Tiedemann teaches the method of claim 17, 23 wherein the determination comprises extracting the reverse link power control instruction from a signal received on the reverse link.

Regarding claim 38, Tiedemann teaches the apparatus of claim 19, wherein the means for generating a link quality estimation unit are for generating the link quality

Art Unit: 2618

estimation based on a received power level of the forward link power control instruction.  
(Col.7 line 19-26)

Regarding claim 42, Tiedemann teaches a remote station apparatus 6, comprising: a link quality estimation unit 120 operative to generate a link quality estimation in response to a forward link power control instruction received on a forward link; (Col.7 line 19-26) a power control unit coupled to the link quality estimation unit, the power control unit operative to generate a reverse link power control instruction in response to the link quality estimation; and one or more antennas configured to receive the forward link power control instruction on the forward link, wherein the reverse link power instruction includes one or more commands configured to adjust a transmit power of the forward link at a base station. (Col.8 line 46-63).

Regarding claim 43, Tiedemann teaches a base station apparatus, comprising: a determination unit operative to determine a reverse link power control instruction received on a reverse link for base station transmission on a forward link; an adjustment unit coupled to the determination unit, the adjustment unit operative to adjust a transmission power level of a forward link power control instruction based on the reverse link power control instruction, and one or more antennas configured to receive the reverse link power control instruction on the reverse link. And a transmitter operative to transmit the forward link power control instruction on a forward link common channel. (Col.8 line 46-63).

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD CHAN whose telephone number is (571)272-0570. The examiner can normally be reached on Mon-Fri 10AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NAY MAUNG/

Supervisory Patent Examiner, Art Unit 2618

/Richard Chan/

Examiner, Art Unit 2618

2/14/2011



Application/Control Number: 09/782,751  
Art Unit: 2618

Page 8